STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission On Its Own Motion	))	
Consideration of the federal standard on interconnection in Section 1254 of the Energy Policy Act of 2005	)	06-0525

Comments of Commonwealth Edison Company

Commonwealth Edison Company ("ComEd") submits these comments in response to the Commission's Order of July 26, 2006, ("Order") initiating this proceeding. In the Order, the Commission noted the directive contained in the Energy Policy Act of 2005 ("EPAct") that state commissions consider the standard articulated in the amendment to paragraph 15 of section 111(d) of the Public Utility Regulatory Policies Act of 1978 ("PURPA"), 16 USC 2621(d), for interconnecting generating facilities to local distribution facilities. That provision reads as follows:

> (15) Interconnection. – Each electric utility shall make available, upon request, interconnection service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term 'interconnection service' means service to an electric consumer under which an on-site generating facility on the consumer's premises shall be connected to the local distribution facilities. Interconnection services shall be offered based upon the standards developed by the Institute of Electrical and Electronics Engineers: IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems, as they may be amended from time to time. In addition, agreements and procedures shall be established whereby the services are offered shall promote current best practices of interconnection for distributed generation, including but not limited to practices stipulated in model codes adopted by associations of state regulatory agencies. All such agreements and procedures shall be just and reasonable, and not unduly discriminatory or preferential.

ComEd agrees with the EPAct assumption that IEEE Standard 1547 provides a sound basis for the interconnection of small generators to the electric network. However,

the standard is articulated at a relatively high level and needs further clarification to give it application to real-world generators, utility operating systems, and electric networks. In addition, on its face, IEEE 1547 applies only to the interconnection of generators no larger than 10MVA and, in ComEd's experience, it is not unusual for customers with larger generators – up to 20MVA – to request service that involves interconnection with ComEd's distribution facilities.

To facilitate the interconnection of the range of these small generators and to further the goals of the Federal Energy Regulatory Commission's ("FERC's") Order 2006[1], ComEd has already worked with a special PJM working group to develop PJM-specific clarifications to Standard 1547. The PJM-sponsored Small Generation Interconnection Working Group (SGIWG) convened specifically in an effort to maximize transparency and to provide exceptions and application-related information in connection with PJM's acceptance of the IEEE 1547 standard and its compliance with FERC Order 2006. The SGIWG was comprised of PJM itself, ComEd, and other diverse stakeholders, including generation owners, transmission owners, other electric distribution companies, members of the small generation and distributed generation community, state agencies, the Department of Energy (DOE), and the National Renewable Energy Laboratory (NREL). SGIWG's mission was to develop consensus and to draft interconnection technical standards reasonably consistent with the industry standard IEEE 1547 and in compliance with FERC Order 2006, for adoption and application across PJM. The two resulting PJM manuals set forth the criteria to evaluate interconnection requests (20MW

[1]Order 2006, issued May 12, 2005, requires all FERC-jurisdictional public utilities to file revised federal tariffs containing standard small generator interconnection procedures and a standard small generator interconnection agreement, and to provide interconnection service under them to small generating facilities of no more than 20 megawatts.

and below) for the purpose of determining interconnection design and construction requirements within the PJM footprint for generators that intend to participate in the wholesale energy market[2] and offer clarifications on many of the IEEE 1547 technical standards and requirements.

ComEd exceptions to the IEEE Standard 1547, included in these two new manuals deal with connections to distribution secondary grid networks and distribution secondary spot networks. In addition, the manuals contain ComEd's requirement that trip times for frequency and voltage trips must be 1 second versus the 2 seconds in IEEE 1547[3].

ComEd is also in the process of updating its "Guidelines for the Interconnection of Distributed Generation" (the "DG Book")[4] and will replacing the single book with two new separate documents developed with its sister company, PECO, in light of, and

---

[2] The two PJM manuals are:

- **Attachment H**: Small Generator (10MW and below) Technical Requirements and Standards. http://www.pjm.com/committees/working-groups/sgiwg/downloads/20060724-attachment-h-manual-14b-100305-2-10-mw.pdf

- **Attachment H-1**: Small Generator (10MW to 20MW) Technical Requirements and Standards. http://www.pjm.com/committees/working-groups/sgiwg/downloads/20060724-attachment-h-1-manual-14b-040406-10-20-mw.pdf

[3] This is not specifically listed as an exception in the PJM manuals, since the generator must conform to the specific utility's reclosing practice. ComEd has previously provided a white paper on generator network connection exceptions in response to previous ICC Staff data requests. .

[4] ComEd's initial DG Book was published in 2001 to assist generators seeking interconnection through the established interconnection process for distributed resources that ComEd has used successfully for years. ComEd has had interconnection guidelines available to customers for over 20 years; and in 2001, the DG Book was created specifically to provide a resource targeted to small generators. The DG Book explains processes and requirements associated with the interconnection of distributed generation to the ComEd system and includes a range of information concerning rates, metering, telemetry, stability, wind and photovoltaic relay protection, application forms, inspection criteria, approval milestones and interconnection designs based on generator rating – thus providing the most detailed information available for a potential interconnector without a special study of the specifics applicable to the proposed project. Copies of the DG Book have been distributed to the Commission, the City of Chicago, the Midwest Cogeneration Association, and various distributed generation suppliers and developers. It is currently available electronically to anyone upon request at no cost. The DG Book has guided many interconnections to the ComEd system.

consistent with, recent FERC, PJM and state agency activity and with a determined intent to standardize (and, therefore, facilitate) interconnections in a non-discriminatory way. One document entitled "Exelon Energy Delivery Interconnection Guidelines for Generators 2 MVA or less" will address interconnection guidelines for small generators 2 MVA or less. The other, entitled "Exelon Energy Delivery Interconnection Guidelines for generators greater than 2 MVA and less than 20 MVA", will address interconnection guidelines for these larger generators. The new EED guidelines will be compatible with PJM's new Attachment H and Attachment H-1 Technical Requirements and Standards, *supra*, and are compliant with FERC Order 2006 and Pennsylvania Public Utility Commission Rulemaking[5]. As provided in the first document, generators that are compliant with IEEE 1547.1 and meet the specified screening criteria will be given an expedited process, very similar to that described in Appendix E of FERC Order 2006 (provided that no other ComEd system modifications are required).

These new EED Guidelines are reference books for small generation interconnection developers, providing technical standards and requirements specific to the ComEd and PECO systems and describing the streamlined interconnection processes associated with specific generator types. In some cases, the new EED guidelines offer greater detail than PJM's Technical Requirements and Standards. For example, the EED Guidelines provide relaying diagrams that are specific to the design of ComEd's local distribution system. In addition, the EED Guidelines include processes for witness testing of new generation interconnections that are consistent with ComEd's distribution operations.

[5] Final Rulemaking Re Interconnection Standards for Customer-generators pursuant to Section 5 of the Alternative Energy Portfolio Standards Act, 73 P.S. § 1648.5 L-00050175

In summary, while IEEE Standard 1547 provides a good high level interconnection standard, the Commission must permit individual utilities to make clarifications and perhaps even occasional exceptions to adapt the standard to the needs of utilities' own networks and operating systems. In ComEd's case, the above-referenced PJM manuals and the forthcoming EED Guidelines do just that.

Respectfully submitted,
COMMONWEALTH EDISON COMPANY

By: 

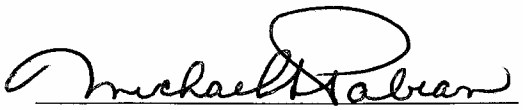
E. Glenn Rippie
Foley & Lardner LLP
321 N. Clark, Suite 2800
Chicago, IL 60610
(312) 832-4910
grippie@foley.com

Michael S. Pabian
Assistant General Counsel
Exelon Business Services Company
10 South Dearborn Street, 35th Floor
Chicago, Illinois 60603
(312) 394-5831
michael.pabian@exeloncorp.com

DATED: November 2, 2006

Certificate of Service

I, Michael S. Pabian, hereby certify that I have served a copy of the foregoing Comments Of Commonwealth Edison Company on the parties by electronic mail, this 2nd day of November, 2006.



Michael S. Pabian